

WHAT IS CLAIMED IS:

1. A control system for an automatic transmission, comprising:

an oil pressure control mechanism which supplies an oil pressure to the transmission;

an oil pressure detection device which detects the oil pressure supplied from the oil pressure control mechanism to the transmission; and

a controller which functions to:

calculate a maximum torque transmittable by the transmission based on a speed ratio of the transmission and the detected oil pressure;

calculate an engine torque reduction amount from the difference between a torque being inputted into the transmission and the maximum transmittable torque; and

reduce a torque of an engine according to the engine torque reduction amount.

2. A control system according to claim 1, further comprising an oil temperature detection device which detects an oil temperature in the transmission,

wherein the controller further functions to reduce the torque of the engine according to the engine torque reduction amount when the detected oil temperature is lower than a first low temperature.

3. A control system according to claim 1, wherein the controller further functions to reduce the torque of the engine according to the engine torque reduction amount when the torque being inputted into the transmission is greater than the maximum transmittable torque.

4. A control system according to claim 2, wherein the controller further functions to maintain the speed ratio of the transmission at a predetermined ratio when the detected oil temperature is lower than a second low temperature which is lower than the first low temperature.

5. A control system according to claim 1, wherein:

the transmission is a V-belt continuously variable transmission comprising a primary pulley, a secondary pulley, and a V-belt wrapped around the primary pulley and the secondary pulley, the V-belt being gripped based on an oil pressure supplied from the oil pressure control mechanism to the primary pulley and the secondary pulley;

the oil pressure detection mechanism detects at least one of the oil pressure supplied from the oil pressure control mechanism to the primary pulley, and the oil pressure supplied from the oil pressure control mechanism to the secondary pulley; and

the controller further functions to:

calculate a thrust of at least one of the pulleys based on the detected oil pressure; and

calculate the maximum transmittable torque from the calculated pulley thrust and the speed ratio of the transmission.

6. A control method for an automatic transmission connected to an oil pressure control mechanism for supplying an oil pressure to the transmission, the method comprising:

detecting the oil pressure supplied from the oil pressure control mechanism

to the transmission;

calculating a maximum torque transmittable by the transmission based on a speed ratio of the transmission and the detected oil pressure;

calculating an engine torque reduction amount from the difference between a torque being inputted into the transmission and the maximum transmittable torque; and

reducing a torque of an engine according to the engine torque reduction amount.